

OM nucleic - nucleic search, using sw model
Run on: April 26, 2003, 15:27:34 ; Search time 264 Seconds
(without alignments)
Scoring table: 13392.566 Million cell updates/sec

ALIGNMENTS

QY	1441 TCTRAACTCGTCCCCAGAGGGACTTGATGAGAACCAACTTGAGAAGCCAAAG	1500	CC	The present sequence for human diagnostic and therapeutic (dithp) cDNA sequence #9 is 1 of 71 (AA503012-AA503082) novel sequences described in the invention. The present sequence (Incyte ID No: 237152dec) encodes an extracellular information molecule. The dithp polynucleotides may be used to diagnose a condition disease or disorder associated with human molecules. They can be used to identify the presence of similar nucleic acids. Dithp polynucleotides may be used to generate hybridisation probes for use in chromosomal mapping. Polypeptides (DITHP) encoded by dithp are used to screen for molecules which bind to them and modulate their activity. Dithp polynucleotides can be used for gene therapy of disorders such as severe combined immunodeficiency syndrome (SCID), cystic fibrosis, thalassemia, haemophilia resulting from Factor VIII or IX deficiencies, cardiovascular disorders e.g. familial hypercholesterolaemia (FH), cell proliferative disorders, neurodegenerative disorders, autoimmune/inflammatory disorders, infectious disorders and developmental disorders. The antibodies can be used to analyse protein expression levels.
RESULT 2				
AS03020	AA503020 standard; cDNA; 1517 BP.			
ID	AA503020;			
XX				
AC				
XX				
DT	29-AUG-2001 (first entry)			
DE	Human diagnostic and therapeutic (dithp) cDNA sequence #9.			
XX				
KW	Human diagnostic and therapeutic molecule; dithp; gene therapy; thalassemia; cardiovascular disorder; cell proliferative disorder; cancer; neurodegenerative disorder; autoimmune disorder; infectious disorder; inflammatory disorder; developmental disorder; Incyte ID number 237152dec; extracellular information molecule; ss.			
XX				
OS	Homo sapiens.			
XX				
PN	WO200121836-A2.			
XX				
PD	29-MAR-2001.			
XX				
PF	19-SEP-2000; 2000WO-US255643.			
XX				
PR	23-SEP-1999; 99US-0155760.			Query Match: 68.0%; Score 1068; DB 22; Length 1517; Best Local Similarity 98.9%; Pred. No. 7.6e-164; Matches 1074; Conservative 0; Mismatches 12; Indels 0; Gaps 0;
PR	24-SEP-1999; 99US-0155939.			QY 483 GTCGGGGCGCGGGAGGGACATGTGGAGGCAGCAGAGGCCGCCTCG 542
PR	24-SEP-1999; 99US-0156294.			Db 1 GTCGGGGCGCGGGAGGACATGTGGAGGCAGCAGAGGCCGCCTCG 60
PR	28-SEP-1999; 99US-0156565.			QY 543 CCCAGCGTAGTATCAGGCCCTCGCGTCACTTGCGTGTACCTCCGCTCT 602
PR	28-SEP-1999; 99US-0156624.			Db 61 CCCAGCGTAGTATCAGGCCCTCGCGTCACTTGCGTGTACCTCCGCTCT 120
PR	28-SEP-1999; 99US-0156625.			QY 603 GTGCTTCCAGGTACAGGTTCTGGTGGAGAACCTGGACTTCATCCACGTA 662
PR	24-NOV-1999; 99US-0167410.			Db 121 GTGCTTCCAGGTACAGGTTCTGGTGGAGAACCTGGACTTCATCCACGTA 180
PR	24-NOV-1999; 99US-0167453.			QY 653 GAACCGAGCGGGCTCGGAGCATGTGGCTAGCCCTAGGGCTCTACCGCTA 722
PR	24-NOV-1999; 99US-0167517.			Db 181 GAACCGAGCGGGCTCGGACCATGTGGCTAGCCCTAAGCAGTGGCGTACAGCTA 240
PR	24-NOV-1999; 99US-0167520.			QY 723 CAGCCGGACCAGCTGGAAACACATCCAGTCAGCTGGCCAGGATCAGGCCGGGGA 782
PR	24-NOV-1999; 99US-0167542.			Db 241 CAGCCGGACCAGCTGGAAACACATCCAGTCAGCTGGCCAGGATCAGTGGCCGGGGA 300
PR	29-NOV-1999; 99US-0167943.			QY 783 GGATGGGGACAAGTATGCCAGCTGTGGAGACAGACACACTTCGCTAGTCAGTCG 842
PR	30-NOV-1999; 99US-0168197.			Db 301 GGATGGGGACAAGTATGCCAGCTGTGGAGACAGACACACTTCGCTAGTCAGTCG 360
PR	30-NOV-1999; 99US-0168265.			QY 843 GATCAAGGCCAGGAGGGAACTCTACCTGTGATGACCGCAAAGGCCAAAGCTCGTGG 902
PR	30-NOV-1999; 99US-0168429.			Db 361 GATCAAGGCCAGGAGGGAACTCTACCTGTGATGACCGCAAAGCCAAGCTCGTGG 420
PR	01-DEC-1999; 99US-0168432.			QY 903 GAAGCCCCATGGACCACCAAGGGATGTGTCTAGCAGAAGGTCTGGAGAACACTA 962
PR	01-DEC-1999; 99US-0168432.			Db 421 GATCAAGGCCAGGAGGGAACTCTACCTGTGATGACCGCAAAGCCAAGCTCGTGG 480
XX	99US-016859.			QY 963 CAGGCCCTGATGGACCACACAAAGGGATGTGTCTAGCAGAAGGTCTGGAGAACACTA 480
PA	(INCYT) INCYTE GENOMICS INC.			Db 481 CAGGCCCTGATGGACCACACAAAGGGATGTGTCTAGCAGAAGGTCTGGAGAACACTA 540
PI	Hodgson DM, Lincoln SE, Russo FD, Spiro PA, Banville SC, Shah P, Chalup MS,			QY 1023 GCGGGGGAGGGCCCAGACCGGGAGAACCGAGCAGCGAGCGCTCATGAGCGCTA 1082
PI	Biratcher SR, Dufour GE, Cohen HJ, Rosen BH, Hillman JL, Jones AL, Yu JY, Greenawalt LB, Panzer SR, Roseberry AM, Wright RJ, Chen W, Liu TF, Yap PE, Stockreher TK, Amshey S, Fong WT;			Db 541 GCGCGGGAGGCCCAAGACCGGGAGAACAGCAGCGAGCAGTCATGAGCGCTA 600
XX				QY 1083 CCCCAAGGGCAAGCGGGCTTGAGAACCCCTGAGTACACGACGGTGACCAAGAGTC 1142
DR	WPT; 2001-281607/29.			Db 601 CCCAAGGGCAAGCGGGCTTGAGAACCCCTGAGTACACGACGGTGACCAAGAGTC 660
PT	Novel diagnostic and therapeutic polynucleotides, used in disease diagnosis and for gene therapy of conditions such as cancer and thalassemia -			QY 1143 CCGTGGGTCGCCACACCTCTGGCTAGGACCCCGCCGCGCCCTAGGTCGC 1202
XX				Db 661 CGCTGGGTCGCCACACCTCTGGCTAGGACCCCGCCGCGCCCTAGGTCGC 720
PS	Claim 1: Page 255; 299pp; English.			QY 1203 CTGGCACACTCACCTCCAGAAAATCTGAGGAAATTTCATGAAAAATA 1262

Db 721 CGGGCCACACTCACCTGCCAGAACAACTGCAATCAGGAATTTCACAGGAAATAA 780
 Qy |||||||
 Db 781 GGAAGAGCTCTTGTGATTTGTGATGTTAAAGAGAACAAACTGAACCAAAC 1322
 Qy |||||||
 Db 841 TTGGGGGAGGGGTGATAAGGTTATGTTGACTGAAACCCGATGACAAAGACT 900
 Qy |||||||
 1383 CAGCAAAAGGCTGTGATGTCACCCACAGGCTGCTGCTCTCTAGGACAGAAC 840
 Db 901 CAGCAGAAGGGCTGTGATGTCACCCACAGGCTGCTGCTCTAGGACAGAAC 960
 Qy |||||||
 Db 1443 TAACTGTCGCCAGAGGAGCTGATGAGAACACACTTGAGAGCCAAGTC 1502
 Db 961 TAACTGTCGCCAGAGGAGCTGATGAGAACACACTTGAGAGAACCAAGTC 1020
 Qy |||||||
 1503 CTTTTCCTCAAGGTTCTGAAGGAAAAAAACAAACAAAAAAACAAAAAAA 1562
 Db 1021 CTTTTCCTCAAGGTTCTGAAGGAATCAAAAAAAACAAACAAAC 1080
 Qy |||||||
 1563 AAAAA 1568
 Db 1081 GAGAA 1086

RESULT 3

ID AAZ20594 standard; DNA; 1128 BP.

XX AAZ20594;

AC 23-NOV-1999 (first entry)

DE Human fibroblast growth factor 98 coding sequence.

XX Fibroblast growth factor 98; FGF98; human; multipotent neural stem cell;

KW progenitor cell; peripheral neuropathy; amyotrophic lateral sclerosis; Alzheimer's disease; Parkinson's disease; Huntington's disease; dementia; ischaemic stroke; brain injury; acute spinal cord injury; infection;

KW nervous system tumour; multiple sclerosis; epilepsy; metabolic disease; peripheral nerve trauma; retinitis pigmentosa; macular degeneration; retinal detachment; myocardial infarction; peripheal vascular disease; renal artery disease; diagnosis; therapy; ss.

KW Homo sapiens.

XX Location/Qualifiers

PH 609..1091

FT CDS /*tag= a /product= FGFR98

XX W09946381-A2.

ED 16-SEP-1999.

PF 09-MAR-1999; 99W0-US05235.

XX 09-MAR-1998; 98US-0077411; 29-APR-1998; 98US-0083553; 08-MAR-1999; 99US-0264851.

PA (CHIR) CHIRON CORP.

XX Cen H, Garcia PD, Grieshammer U, Kassam A, Lee PP, Pot D;

PI Gospodarowicz D, Martin K;

XX WPI; 1999-551410/46.

DR P-PSDB, AAV39630.

XX New polynucleotide encoding a fibroblast growth factor, useful for

PT treating peripheral neuropathy, Alzheimer's disease, ischaemic stroke, brain or spinal cord injury, nervous system tumours, multiple sclerosis, or epilepsy -
 XX
 PS Disclosure; Page 59; 60pp; English.

This sequence encodes the human fibroblast growth factor 98 (FGF98) of the invention. FGF98 can be used for the isolation, regeneration, proliferation, and differentiation of mammalian multipotent neural stem cells, progenitor cells and progeny. Primary central (CNS) and peripheral nervous system (PNS) cells when treated with FGF98 proliferate, have at least a limited self regeneration capacity, and can undergo lineage restriction in response to the local environment. The FGF98 sequences can be used for providing trophic support for cells in a patient. They be used to treat e.g. peripheral neuropathy, amyotrophic lateral sclerosis, Alzheimer's disease, Parkinson's disease, Huntington's disease, ischaemic stroke, brain injury, acute spinal cord injury, nervous system tumours, multiple sclerosis, infection, dementia, epilepsy, peripheral nerve trauma or injury, exposure to neurotoxins, metabolic diseases, disorders of insufficient blood cells, retinitis pigmentosa, age-related macular degeneration, retinal detachment, myocardial ischaemia/infarction, peripheral vascular disease, renal artery disease and wound healing. Cells produced by treatment with FGF98 are also used to screen drugs and growth factors, which may affect development, differentiation, survival and/or function of CNS and PNS derived neurons and glia. FGF98 can also be used for the production of large amounts of otherwise minor populations of cells to be used for generation of cDNA libraries for the isolation of rare molecules expressed in precursor cells or progeny; cells produced by treatment may directly express growth factors or other molecules.

XX Sequence 1128 BP; 197 A; 385 C; 402 G; 144 T; 0 other;

SQ

Query Match	65..5%	Score 1027..6	DB 20	Length 1128
Best Local Similarity	99..6%	Pred. No. 2..5e-157		
Matches 1030; Conservative	0	Mismatches 4		
DE		Indels 0		
XX		Gaps 0		

Qy 1 CCCACCGTCCCCGACGCCGCGAGGAGGAGACATGACCCGGGGGGCCCA 60
 Db 60 CCCACCGTCCCCGACGCCGCGAGGAGGAGACATGACCCGGGGGGCCCA 119
 Qy 61 GACGGAGCCGCGCTGACGCTTCCGGCTGCAGCCGCCGACCCGGAGGCC 120
 Db 120 GACGGAGCCGCGCTGACGCTTCCGGCTGCAGCCGCCGACCCGGAGGCC 179
 Qy 121 CCCTGACCCAGCAGCTCCGGCGCCGGCGAGGAGC3AACTCGCTTCAGACCC 180
 Db 180 CCCTGACCCAGCAGCTCCGGCGCCGGCGAGGCCAACTCGCTTCAGACCC 239
 Qy 181 CGGCATGCTGTCGGGAGCTGAGCCGAGCCGCTCCACGGACCCGGACGCC 240
 Db 240 CGCGCATGCTGTCGGCCGGACTGAGCGGGCAGCCACGCCGGACGCC 299
 Qy 241 GGCGGCCAGAGCTGAGCAGCTCCGGACCCGGCGAGGCCCTCTGACAACGGCTG 300
 Db 300 GGCGGCCAGCAGCTGAGCAGCTCCGGACCCGGCGAGGCCCTCTGACAACGGCTG 359
 Qy 301 CGGGCCCGACCCCTGGCGCAGGCCGGGGGAGGCCGAGCAGCTCGCAGCAC 360
 Db 360 CGGGCCCGACCCCTGGCGCAGGCCGGGGAGGCCGAGCAGCTGGGGGGGG 419
 Qy 361 CGCTGATGCCAGGGCGAGGCCGGGGAGGCCGAGCAGCTCGCAGCAC 420
 Db 420 CGCTGATGCCAGGGCGAGGCCGGGGAGGCCGAGCAGCTCGCAGCAC 479
 Qy 421 AGCCGCCAGAGGCCGGGGAGGCCGAGCAGCTGGGGGGGGGGGGGGGG 480
 Db 480 AGCCGCCAGAGGCCGGGGAGGCCGAGCAGCTGGGGGGGGGGGGGGGGGG 539
 Qy 481 CGGTCGGCGCCGGGGGGAGCTGTCAGGAGCCGCGCCGCGCCCTCC 540
 Db 540 CGGTCCGGCGCCGGGGGGAGCTGTCAGGAGCCGCGCCGCGCCCTCC 599

QY 1172 AGGCCACCCGGCGGCCCTCAGGTGCGCCACACTCACCTCCAGAAACTG 1231
 QY ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
 Db 661 AGGCCACCCGGCGGCCCTCAGGTGCGCCACACTCACCTCCAGAAACTG 720
 QY 1232 CATTAGAGGAATATTATACATGAAAATAAATAGGAAGAACGCTTATTTTGCAATTTGT 1291
 Db 721 CATTAGAGGAATATTATACATGAAAATAAATAGGAAGAACGCTTATTTTGCAATTTGT 780
 QY 1292 TTAAGAGAGACAAACTGACCACAAACTCTGGGGAGGGTATAGGA 1344
 Db 781 TTAAAGAGACAAACTGACCACAAACTCTGGGGAGGGTATAGGA 833

RESULT 5
 AAV29532
 ID AAV29532 standard; cDNA; 917 BP.
 XX
 AC AAV29532;
 XX
 24-SEP-1998 (first entry)
 DT
 DE Nucleotide sequence of fibroblast growth factor homologue zFGF-5.
 XX
 KW Human; fibroblast growth factor homologue; zFGF-5; cardiac cell;
 KW antagonist; antibody; heart failure; stroke; hypertension; cancer;
 KW bone defects; arthritis; cardiac myocyte hyperplasia; ds.
 OS Homo sapiens.
 XX
 FH Key Location/qualifiers
 FT 1..624
 FT /*tag= a
 FT /product= "Fibroblast growth factor homologue zFGF-5"
 PN W09816644-A1.
 XX
 PD 23-APR-1998.
 XX
 PR 16-OCT-1997; 97WO-US18635.
 XX
 PR 16-OCT-1996; 96US-0028646.
 XX
 PA (ZYMO) ZYMOGENETICS INC.
 PI Bukowski TR, Conklin DC, Deisher TA, Hansen B, Holdeman SD;
 PI Raymond FC, Sheppard PO;
 DR WPI; 1998-251291/22.
 DR P-PSDB; AAW57413.
 XX
 PT New fibroblast growth factor homologue, zFGF-5 - used to develop
 products for treating e.g. heart failure, stroke, hypertension, bone
 defects or cancers, arthritis, or wounds
 XX
 PS Claim 1; Pages 73-74; p 94pp; English.

This is the nucleotide sequence of the novel fibroblast growth factor homologue zFGF-5, used in the method of the invention. The zFGF-5 polypeptides can be used (optionally ex vivo) for enhancing the proliferation of cardiac tissue cells. The polypeptides, nucleic acids, antagonists, and antibodies can also be used in the treatment of disorders such as heart failure, stroke, hypertension, bone defects, cancer, arthritis, or wounds. The products can also be used in the study of cardiac myocyte hyperplasia and regeneration, to target delivery of agents to the heart and for detection and diagnosis. The recombinant cells can be used to produce the protein.

XX Sequence 917 BP; 244 A; 258 C; 252 G; 163 T; 0 other;

SQ Query Match 51.3%; Score 805.2; DB 19; Length 917;
 Best Local Similarity 91.6%; Pred. No. 2e-121; 0; Mismatches 907; Conservative 3; Indels 80; Gaps 2;

RESULT 6
 AAD07795 No. 1; Mismatches 907; Conservative 3; Indels 80; Gaps 2;
 ID AAD07795 standard; cDNA; 917 BP.

QY 550 ATGATTCAGGCCCTCGCTGACTTCCTGCTGCTGCT 609
 QY ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| ||||||| |||||||
 Db 1 ATGATTCAGGCCCTCGCTGACTTCCTGCTGCTGCT 60
 QY 610 CAGTTCAGGGCTGGTTGGAGAGCTGGACTTCGCTCATCCACGGGAGAAC 669
 QY 611 CAGGTCAGGGCTGGTTGGAGAGCTGGACTTCGCTCATCCACGGGAGAAC 620
 Db 730 ACCAGTGGAAACACATCCAGTCAGTGGAGACAGACCTTGGTAGTCAACTCCGATCAAG 789
 Db 181 ACCAGTGGAAACACATCCAGTCAGTGGAGACAGATGG 240
 QY 790 GACAAGTATGCCAGCTCTAGTGGAGACAGACCTTGGTAGTCAACTCCGATCAAG 849
 Db 241 GACAAGTATGCCAGCTCTAGTGGAGACAGACCTTGGTAGTCAACTCCGATCAAG 300
 QY 850 GGCAGAGGAGGAAATCTACCTGTCATGAAACCCGAAAGGCAAGCTCCGGAGGGAGGCC 909
 Db 301 GGCAGAGGAGCAGGAATCTACCTGTCAGTGGAGACAGCTCCGGGGAGGCC 360
 QY 910 GATGCCACCAAGCAGGAGTGGCTCATGAGAAGGTGTGGAGAACACTACAGGCC 969
 Db 361 GATGGCACACAGAAGGAGTGGTGTCAAGAGAACAGTCTGGAGAACACTACAGGCC 420
 QY 970 CTGATGCGGTAAGTACTCGGCTGGTAGTGGGGTCAACCAAGAGGGGGCCGG 1029
 Db 421 CTGATGCGGTAAGTACTCGGCGGTAGTGGGGCTTCACCAAGAAGGGCGCCGG 480
 QY 1030 AAGGGCCCAGAACCGGGAGAACCGAGCAGGAGCTCATGAGGCTACCCCAA 1089
 Db 481 AAGGGCCCAGAACCGGGAGAACGAGCAGGAGCTCATGAGGCTACCCCAA 540
 QY 1090 GGGCAGCCGAGCTCAGAAGGCCCTCAAGTACAGCAGGAGTGGCTGG 1149
 Db 541 GGGCAGCCGGAGCTTCAGAAGGCCCTCAAGCAGGAGTGGCTGG 600
 QY 1150 ATCCGCCACACCCCTGCTAGCCACACCCGGCGGCCCTCAGTCGCCCTGGCA 1209
 Db 601 ATCCGCCACACCCCTGCTAGCCACACCCGGCGGCCCTCAGTCGCCCTGGCA 659
 QY 1210 CACTACACTCCAGAACACTGCATCAGGGAAATTTCATGAAATAAGGAAGA 1269
 Db 660 CACTACACTCCAGAACACTGCATCAGGGAAATTTCATGAAATAAGGAAGA 708
 QY 1270 GCTCTATTGTCATGTTAAAGAACAGAACAAACTGAACCAAACCTCTGGGG 1329
 Db 709 ----- 708
 QY 1330 GAGGGGTGATAAGGATTATGTGACTCTGAAACCCCGATGACAAGAACACTCACCA 1389
 Db 709 ----- 708
 QY 1390 AGGGACTGAGCTCAACCCAGGGCTTCTCTCTAGAACAGAACACTCAACTC 1449
 Db 761 AGGGACTGAGCTCAACCCAGGGCTTCTCTCTAGAACAGAACACTCAACTC 820
 QY 1450 GTCCCCAGAGGAGCTTGTAGGAGAACACACTCTGAGAACGCCAAAGTCCTTTC 1509
 Db 821 GTCCCCAGAGGAGCTTGTAGGAGAACACACTCTGAGAACACCACACTTC 880
 QY 1510 CCAAGGTCTGAANGAAAAAA 1539
 Db 881 CCAAGGTCTGAANGAAAAAA 910

AC AAD07795; XX 10-SEP-2001 (first entry) XX Human fibroblast growth factor (zFGF5) cDNA. XX Human; fibroblast growth factor-18; zFGF5; FGF receptor-2; FGF receptor-3; cytotoxin; cell proliferation inhibitor; tumour; multiple myeloma; bladder carcinoma; cervix carcinoma; cytostatic; thyroid carcinoma; osteosarcoma; ss; OS Homo sapiens.

XX Key Location/Qualifiers FH CDS 1..624 FT sig_peptide /product= "Human fibroblast growth factor (zFGF5)" 1..81 FT mat_peptide /*tag= b 82..621 FT /*tag= c /product= "Human mature fibroblast growth factor (zFGF5)" XX WO200139788 A2. XX 07-JUN-2001. XX 28-NOV-2000; 2000WO-US32380. PR 02-DEC-1999; 99US-0452977. XX (ZYMO) ZYMOGENETICS INC. XX West JW; DR WPI; 2001-417789/44. DR P-PSDB; AAE04536. XX PT Novel fibroblast growth factor targeting composition useful for inhibiting the proliferation of cells expressing FGF receptor 3 or FGF receptor 2 - disclosure; Page 57-58; 62pp; English. XX The present invention relates to methods for targetting cells that express fibroblast growth receptor-3 or -2. Fibroblast growth factor-18 (FGF-18) binds with FGF receptor-2 and -3. A targeting composition comprising FGF-18 component and cytotoxin, is useful for inhibiting the proliferation of cells that express FGF receptor-3 or -2, in a subject having tumour cells such as multiple myeloma cells, bladder carcinoma cells, cervix carcinoma cells, thyroid carcinoma cells, osteosarcoma cells and intimal smooth muscle cells. The present sequence is a cDNA encoding human zFGF5 protein. XX Sequence 917 BP; 244 A; 258 C; 252 G; 163 T; 0 other; SQ Query Match Best Local Similarity Score 805.2; DB 22; Length 917; Matches 907; Conservative 0; Mismatches 3; Indels 80; Gaps 2; RESULT 7 AAS0951 ID AAS0951 standard; DNA; 917 BP. AC AAS0951; XX 16-JUL-2001 (first entry) DB 610 CAGGTACAGGTGCTGGTGCAGGAGACGTTGACTTCGGATCCAGGTGAGAACCG 669 61 CAGGTACAGGTGCTGGTGCAGGAGACGTTGACTTCGGATCCAGGTGAGAACCG 120 670 ACGGGGCTCAGGAGCTGAGCTGGCGCTTGACAGCTGGCGCTTGACAGCTGGCG 729 121 ACGGGGCTCAGGAGCTGAGCTGGCGCTTGACAGCTGGCGCTTGACAGCTGGCG 180 QY 730 ACCAGTGGAAACACATCCAGGCTCTGGCCGGAGGATCTGGCCGGCGAGGATCG 789 Db 181 ACCAGTGGAAACACATCCAGGTCTGGCCGGAGGATCTGGCCGGAGGATCG 240 Db 790 GACAAGTAGGCCAGCTCTAGTGGAGAGACACCTTGGTAGTCAGTCGGATCAG 849 Db 241 GACAGATGCCCAGCTCTAGTGGAGAGACACCTTGGTAGTCAGTCGGATCAG 300 Db 850 GGCAGAGGAGCGGAATTCTACCTGTGCAAGACCGCAAGGCAAGCTGGGGAGCC 909 Db 301 GGCAGAGGAGCGGAATTCTACCTGTGCAAGACCGCAAGGCAAGCTGGGGAGCC 360 QY 910 GATGGCACCCAGCAGGAGCTGGTGTCTCATCGAGAGGTTCTGGAGAACACTACGCC 969 Db 361 GATGGCACCCAGCAGGAGCTGGTGTCTCATCGAGAGGTTCTGGAGAACACTACGCC 420 Db 970 CTGAGTGGCTAAGTACTCGGGTGGAGACAGGAGCTGGCTTCACCAAGAAGGGCGCC 1029 Db 421 CTGAGTGGCTAAGTACTCGGGTGGAGACAGGAGCTGGCTTCACCAAGAAGGGCGCC 969 Db 541 GGGCAGCGGAGCTCAGGAGAACGAGGAGTGGTGTCACTGAGAACACTACGCC 420 Db 481 AAGGCCCCAAGAACCGGGAGAACAGGAGCTGGCTACCCAG 540 QY 1090 GGGCAGCCCAAGAACGCCGGAGAACGAGGAGGAGCTGGCTTCACCAAGAAGGGCGCC 480 Db 541 GGGCAGCGGAGCTCAGGAGAACGAGGAGTGGTGTCACTGAGAACACTACGCC 420 Db 1150 ATCGGCCACACACCCCTCTAGGCCACCCGCCGGCGCCGCCCTCAGGNGGCCCTGGCA 1209 Db 601 ATCGGCCACACACCCCTCTAGGCCACCCGCCGGCGCCGCCCTCAGGNGGCCCTGGCA 659 QY 1210 CACTCACACTCCAGAAACTGCACTCAGGAAATTTCACATGAAATAAGGAAACAA 1269 Db 650 CACTCACACTCCAGAAACTGCACTCAGGAAATTTCACATGAAATAAGGAAACAA 708 QY 1270 GCTCTATTITGTCATGTGTTAAAGAGAGAACAAACTGAAACCAAACCTTGGGG 1329 Db 709 -----ATAAGGTTTATGTTGATGAAACCCCGATGACAAAGACTCACGAA 708 QY 1330 GAGGGGTATAAGGATTATTGTTGACTGTGAAACCCCGATGACAAAGACTCACGAA 1389 Db 709 -----ATAAGGTTTATGTTGATGAAACCCCGATGACAAAGACTCACGAA 760 QY 1390 AGGGACTGTAGTCACCCACAGGGCTGCTGCTCTCTAGGACAGAACCTTAACTC 1449 Db 761 AGGGACTGTAGTCACCCACAGGGCTGCTGCTCTCTAGGACAGAACCTTAACTC 820 QY 1450 GTCCCCAAGGAGACTGTGATGAGAACCAACTTGAGAGGCCAACGCTTTC 1509 Db 821 GTCCCCAAGGAGACTGTGATGAGAACCAACTTGAGAGGCCAACGCTTTC 880 QY 1510 CCAAGGTTCTGAGGAAAAAAA 1539 Db 881 CCAAGGTTCTGAGGAAAAAAA 910

	CDS	1.. 624
FT	/tag= a	
FT	/product= "zFGF-5"	
FT	1..78	
FT	/*tag= b	
FT	79..621	
FT	/*tag= C	
FT	/label= Mature_zFGF-5	
XX		
PN	US6207442-B1.	
XX		
PD	27-MAR-2001.	
XX		
PF	15-OCT-1998; 980US-0173043.	
XX		
PR	16-OCT-1997; 97US-0062061.	
XX		
PA	(ZYMO) ZYMOGENETICS INC.	
XX		
PT	Raymond CK;	
XX		
DR	WPI; 2001-256851/26.	
XX		
DR	P-PSDB; AAU01240.	
XX		
PT	Preparing a double-stranded, circular DNA molecule, involves homologous recombination of one or more donor DNA fragments encoding the protein of interest, with an acceptor plasmid and DNA linkers in host cell -	
XX		
PS	- Example 5; columns 25-28; 23pp; English.	
XX		
CC	The sequence encodes a Human fibroblast growth factor homologue, zFGF-5, used to demonstrate the method of the invention. The method of the invention comprises preparing a double-stranded, circular DNA molecule, comprising combining donor DNA fragments encoding the protein of interest with an acceptor plasmid, and two DNA linkers in a <i>Saccharomyces cerevisiae</i> host plasmid. The encoding DNA is linked to the acceptor plasmid by homologous recombination of with the linkers and acceptor plasmid to form the closed, circular plasmid. The obtained plasmid is useful for transforming host cells and producing proteins of interest. The method allows for production of a standardised plasmid into which a variety of DNA sequences can be readily inserted and subsequently expressed.	
XX		
SQ	Sequence 917 BP; 244 A; 258 C; 252 G; 163 T; 0 other;	
	Query Match 51..3%; Score 805..2; DB 22; Length 917; Best Local Similarity 91..6%; Pred. No. 2e-121; 907; Conservative 0; Mismatches 3; Indels 80; Gaps 2; Matches 0; Gaps 2;	
QY	ATGTTATCGGCCCTCGCCCTGCACTTGCCCTGTGTTTACACTTCTGGCTGTGCTTC 609	RESULT 8
Db	1 ATGTTATCGGCCCTCGCCCTGCACTTGCCCTGTGTTTACACTTCTGGCTGTGCTTC 609	ADD07796
QY	CAGGTACAGGTGGTGGCCGAGGAGAACGTGACTTCGCATCAGCTGGAAACCC 669	ID ADD07796 standard; cDNA; 1023 BP.
Db	61 CAGGTACAGGTGGTGGCCGAGGAGAACGTGACTTCGCATCAGCTGGAAACCC 120	XX
QY	670 AGCGGGCTGGACGATGGCCGAGGAGAACGTGACTTCGCATCAGCTGGAAACCC 729	AC ADD07796;
Db	121 AGCGGGCTGGACGATGGCCGATCAGCTGGAAACCC 180	XX
QY	730 ACCAGTGGAAACATCCAGGTCTGGCCGGAGGATCAGTGGCCGGAGGATGG 789	DE 10-SEP-2001 (first entry)
Db	181 ACCAGTGGAAACATCCAGGTCTGGCCGGAGGATCAGTGGCCGGAGGATGG 240	XX
QY	790 GACAAGTATGCCAGCTCTTAGTGAGACAGACCTTGCTGGTAGTCAGTCCGATCAG 849	XX
Db	241 GACAAGTATGCCAGCTCTTAGTGAGACAGACCTTGCTGGTAGTCAGTCCGATCAG 300	KW
OY	850 GCCAAGGAGCGGAATCTACCTGCTGGCATGACCCGAAGGCAAGCTGGGGAGCCC 909	KW
Db	301 GCGCAAGGAGCGGAATCTACCTGCTGGCATGACCCGAAGGCAAGCTGGGGAGCCC 360	KW
OY	910 GATGCCACCCAGAAGGAGTGTGTTCACTGAGAAGGTTCTGGAGAACACATCACGGCC 969	OS
		MUS musculus.
		XX
		FH
		Key
		CD5
		Location/qualifiers
		1..624
		/*tag= a
		/product= "Mouse fibroblast growth factor (zFGF5)"
		XX
		PN WO200139788-A2.
		XX
		PD 07-JUN-2001.
		XX
		PP 28-NOV-2000; 2000WO-US32380.
		XX
		PR 02-DEC-1999; 99US 0452977.

XX	(ZYMO) ZYMOGENETICS INC.	QY	1210 CACTCACACTCCAGAAACTGCATCAGAGGAATTTCACATGAAATAAGGAAAGA 1269
XX	West JW;	Db	634 CACTCACCCCCCAAGAGAACTACATCAGAGGAATTTCACATGAAATAAGGAGAA 693
XX	WPI: 2001-417789/44.	QY	1270 GCTCTPATTTTGTACATTTGTTAAAGAAGAACAAACTGAACCAAACCTTGGGG 1329
DR	P-PSDB; AAE0537.	Db	694 TCTCTPATTTTGTACATTTGTTAAAGAAGAACAAACTGAACCTAAGTCAGGGAG 753
XX	Novel fibroblast growth factor targeting composition useful for inhibiting the proliferation of cells expressing FGF receptor 3 or FGF receptor 2	QY	1330 GAGGGGTATAAGGATTATTTGTTGACTGTAACCCCGATGACAAGACTCACGCCA 1389
PT	receptor 2	Db	754 GAGGGGAG-AGGATTCCACTGTGACCTGACCGAA--CCCATGACAAGGACTCACACAA 809
PS	Disclosure; page 59-61; 62pp; English.	QY	1390 AGGGACTGTAGTCACCCACAGGGCTGCTGCTGCTGCTGCTGCTGCT 1449
XX	The present invention relates to methods for targetting cells that express fibroblast growth receptor-3 or -2. Fibroblast growth factor-18 (FGF-18) binds with FGF receptor-2 and -3. A targetting composition comprising FGF-18 component and cytotoxin, is useful for inhibiting the proliferation of cells that express FGF receptor-3 or -2, in a subject having tumour cells such as multiple myeloma cells, bladder carcinoma cells, cervix carcinoma cells, thyroid carcinoma cells, osteosarcoma cells and intimal smooth muscle cells. The present sequence is a cDNA encoding mouse zFGF5 protein.	Db	810 GGGGACCGCTGTCACCCACAGGGCTGCTGCTGCTGCTGCTGCT 869
CC	CC	QY	1450 GTCCCCAGGAGCACTGATGAGGAACCAACACTTGAGAGGCCAAGTCCCTT-rr 1508
CC	CC	Db	870 ATCCCGAACAGGAGGACTGTGACGAGGA-----ACTGGAGAACCCAAAGTCCTCC 923
CC	CC	QY	1509 CCCAAGGTCTGAARGAAKAAAAAAAACAAAAAAAACAAAAAAAACAAAAAAA 1568
CC	CC	Db	924 CCCAACGGTCTGAAAGCAACAAAAAAACAAAAAAACAAAAAAACAAAAAA 983
CC	Sequence 1023 BP; 321 A; 253 C; 262 G; 187 T; 0 other;	QY	1569 AA 1570
Query Match	47.0% ; Score 737.6; DB 22; Length 1023;	Db	984 AA 985
Best Local Similarity	86.6%; Pred. No. 1.7e-110;	Matches	885; Conservative 0; Mismatches 99; Indels 38; Gaps 5;
QY	550 ATGTTATCGGCCCTCCGCTGACTTCCCCTGTTTACCTCCCTGCTGCTGCTGCTC 609	RESULT	9
Db	1 ATGTTATCGGCCCTCCGCTGACTTCCCCTGTTTACCTCCCTGCTGCTGCTC 60	ID	ABL91718
QY	610 CAGGTACAGGTGCTGGTCCCGAGGAGACGGACTTCCGCATCAGGTGAGAACAG 669	DE	ABL91718 standard; DNA; 624 BP.
Db	61 CAGGTTCAGGTGTTGGCACGCCAGAGATGTTGACTTCCGCATCCAGTGAGAACCC 609	AC	ABL91718;
QY	670 ACGGGGCCTGGGAGATGTGACCTGGCGCTGCAGCTGCTGCTGCTGCTGCTC 729	XX	DT 28-MAY-2002 (first entry)
Db	121 ACGGGGGCTGAGATGATGATGAGTCGGAGGAGCAGCTGGCTGCGCTGACGG 180	XX	Human; HIV; HCV; gene expression; oligoribonucleotide; tumour; pathogen; Plasmodium; virus; viroid; cytokine; prion; antisense oligonucleotide; cytotstatic; virucide; protozoacide; antibacterial; ds.
QY	730 ACCAGTGGAAACACATCCAGCTCTGGCGCCAGTCAGCTGGAGATGG 739	KW	XK
Db	181 ACCAGTGGAAACACATCCAGCTCTGGCGCTGGAGTCAGTSCCCGTTGGAGACGG 240	OS	Homo sapiens.
QY	790 GACAGTATGCCAGCTCTAGTGTGAGACAGACACTTGGTAGTCAACTCCGATCAG 849	PN	DE10100586-C1.
Db	241 GACAGTATGCCAGCTCTAGTGTGAGACAGACACTTGGTAGTCAACTCCGATCAG 300	PD	11-APR-2002.
QY	850 GGCAGAGAGACGGATTCTACCTCTGCTGATGAAAGCGCAAGGCAAGCTGTTGGGAASGCC 909	XX	
Db	301 GCAGGAGAGACAGATCTACTCTGTTGATGAAAGCGCAAGCTGTTGGGAAGGCC 360	PF	09-JAN-2001; 2001DE-1000586.
QY	910 GATGGCACCCAGAAGGAGCTGTTCTGAGGAAACTACACGCC 969	XX	09-JAN-2001; 2001DE-1000586.
Db	361 GATGGTACTAGCAAGGAGCTGCTGTTCTGTTGAAACTACACGCC 420	PR	09-JAN-2001; 2001DE-1000586.
QY	970 CTGATGTCGCCCTAAGTACTCCGGCTGGACGGCTCACCAGAAGGGGCCGCC 1029	XX	
Db	421 CTGATGTCGCCCTAAGTACTCCGGCTGGACGGCTCACCAGAAGGGGCCGCC 480	PA	(RIBO-) RIBOPHARMA AG.
QY	1090 GGGCAGGCCAGACTCTGAGGCTTCAGTACGAGGGTCAAGGAGGCCCTGG 1149	PT	Inhibiting gene expression in cells, useful for e.g. treating tumors, by introducing double-stranded complementary oligoRNA having unpaired terminal bases
Db	541 GAGACGCCAGCTGCGACGCCCTCAATACACAGCTACCAAGGATGCCGCC 600	PI	WPI; 2002-270454/32.
QY	1150 ATCCGCCAACACCCCTGCCAGGCCAGAACGACAGATGACTCATGAGGGTACCCCTG 1209	XX	Claim 13; Page 46; 104pp; German.
Db	601 ATCCGCCAACACCCCTGCCAGGCCAGAACGACAGATGACTCATGAGGGTACCCCTG 633	PS	The invention relates to a method for inhibiting expression of a target gene (AB091658 ABL91797) in a cell by introducing at least one oligoribonucleotide that has a double-stranded structure consisting of at most 49 sequential nucleotide pairs, with at least part of one strand complementary with the target gene and has at least one end a single-stranded segment of 1-4 nt. The method provides oligoribonucleotides for antisense inhibition of gene expression useful

CC	e.g. for treating tumours but the oligoribonucleotides may also be directed against genes present in pathogens (e.g. Plasmodium or viruses/viroids, pathogenic on humans, animals or plants) or against cytokine, Id, developmental or prion genes. The method provides more effective inhibition of gene expression than use of known oligonucleotides, probably because the unpaired overhang increases stability and thus intracellular concentration.
XX	Sequence 624 BP; 142 A; 180 C; 197 G; 105 T; 0 other;
SQ	Query Match 39.7%; Score 624; DB 24; Length 624; Best Local Similarity 100.0%; Pred. No. 3 6e-92; Matches 624; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
DB	ATGTTATCAGGCCCTCGCCGCACTTGCCTGTGTTACACTTCTCTGCTGCTTC 609 1 ATGTTATCAGGCCCTCGCCGCACTTGCCTGTGTTACACTTCTCTGCTGCTTC 60
QY	CAGGTACAGGTCTGGTGGCCGAGGAGAACGTTGACTCTCGGATCACCGAG 669 61 CAGGTACAGGTCTGGTGGCCGAGGAGAACGTTGACTCTCGGATCACCGAG 120
QY	ACGGGGCTCGGAGCATGTGTCGGCTTAAGAGCTGGCTGGCTACACCGG 729 670 ACGGGGCTCGGAGCATGTGTCGGCTTAAGAGCTGGCTGGCTACACCGG 180
QY	121 ACGGGGCTCGGAGCATGTGTCGGCTACACCGG 729
QY	ACCACTGGAAACATCCAGCTGGCCGAGGATCAGTGCCCCGGCAGGATGG 789 730 ACCAGTGGAAACATCCAGCTGGCCGAGGATCAGTGCCCCGGCAGGATGG 180
DB	181 ACCAGTGGAAACATCCAGCTGGCCGAGGATCAGTGCCCCGGCAGGATGG 240
QY	GACAAGTATGCCAGCTCTACTGTGACAGACAGACACCTTCGGTAGTCAGTCGGATCAAG 849 790 GACAAGTATGCCAGCTCTACTGTGACAGACAGACACCTTCGGTAGTCAGTCGGATCAAG 300
DB	241 GACAAGTATGCCAGCTCTACTGTGACAGACAGACACCTTCGGTAGTCAGTCGGATCAAG 849
QY	GCGAAGGAGGAATCTACTGTGACAGACAGACACCTTCGGTAGTCAGTCGGATCAAG 909 850 GCGAAGGAGGAATCTACTGTGACAGACAGACACCTTCGGTAGTCAGTCGGATCAAG 360
DB	301 GCGAAGGAGGAATCTACTGTGACAGACAGACACCTTCGGTAGTCAGTCGGATCAAG 360
QY	GATGGCACCCAAGGGTGTGTCATCGAGAGGTCTGGAGAACACTACAGGCC 969 910 GATGGCACCCAAGGGTGTGTCATCGAGAGGTCTGGAGAACACTACAGGCC 420
DB	361 GATGGCACCCAAGGGTGTGTCATCGAGAGGTCTGGAGAACACTACAGGCC 420
QY	CTGATGTCGCTAAGTACTCGCTGTGTCAGTGGGCTTCACCAAGAGGGCGGGCGGG 1029 970 CTGATGTCGCTAAGTACTCGCTGTGTCAGTGGGCTTCACCAAGAGGGCGGGCGGG 480
DB	421 CTGATGTCGCTAAGTACTCGCTGTGTCAGTGGGCTTCACCAAGAGGGCGGGCGGG 1029
QY	AAGGGCCCAGACCGGGGAGACCGAGCAGACGTCATTCATGAGGCTTACCCAAAG 1089 1030 AAGGGCCCAGACCGGGGAGACCGAGCAGACGTCATTCATGAGGCTTACCCAAAG 540
DB	481 AAGGGCCCAGACCGGGGAGACCGAGCAGACGTCATTCATGAGGCTTACCCAAAG 540
QY	GGGCAGCCGACCTCTAGAGGCCCTCAAGTACACCGCGTGACCAAGAGGTCCCTCGG 1149 1090 GGGCAGCCGACCTCTAGAGGCCCTCAAGTACACCGCGTGACCAAGAGGTCCCTCGG 600
DB	541 GGGCAGCCGACCTCTAGAGGCCCTCAAGTACACCGCGTGACCAAGAGGTCCCTCGG 600
QY	ATCCGGCCACACCCCTGCTTAG 1173 1150 ATCCGGCCACACCCCTGCTTAG 624
DB	601 ATCCGGCCACACCCCTGCTTAG 624
RESULT	10
AAZ50350	
AAZ50350 standard; cDNA; 688 BP.	
XX	
AC	
AAZ50350;	
XX	
DT	18-MAY-2000 (first entry)
DE	Human heart specific FGF-8b cDNA (predetermined sequence).
XX	
KW	Human; heart specific fibroblast growth factor-8b; FGF-8b; secreted protein; angiogenesis; anti-angiogenesis; cell differentiation; diagnosis; prognosis; screening; treat; cancer; ischaemic heart disease; vascular; gene therapy; ds.

OS Homo sapiens.
 XX
 PH Key
 FT CDS
 FT
 FT sig-peptide 39..623
 FT /product= "Heart specific fibroblast growth factor-8b"
 FT
 FT /tag= a
 FT 39..119
 FT /tag= b
 FT 120..620
 FT /tag= c
 FT /*tag= /*product= "Mature FGF-8b"
 PN WO2000053659-A2.
 XX
 PD 03-FEB-2000.
 XX
 PF 20-JUL-1999; 99WO-US12839.
 XX
 PR 20-JUL-1998; 98US-0093397.
 PR 10-SEP-1998; 98US-0150684.
 XX PA (CURA-) CURAGEN CORP.
 XX PT Shimkets RA;
 XX DR WPI; 2000-182696/16.
 XX DR p-PSDB; AAY44843.
 XX PT Novel angiogenesis and anti-angiogenesis secreted proteins used to
 XX control angiogenesis -
 XX PS Claim 15; Fig 3A; 32pp; English.
 CC The present sequence is a cDNA (predetermined sequence) encoding
 CC heart specific fibroblast growth factor-8b (FGF-8b), an angiogenesis/
 CC anti-angiogenesis secreted protein from human heart library.
 CC The protein exhibits angiogenic
 CC (either inducing or inhibiting) or cell differentiation activity.
 CC The present sequence can be used for diagnosis, prognosis, screening
 CC and treating diseases and disorders associated with aberrant levels of
 CC the secreted protein. The protein can be used to control angiogenesis
 CC e.g. in cancers, ischaemic heart and vascular diseases. The
 CC polynucleotide can also be used in gene therapy.
 XX Sequence 688 BP; 150 A; 209 C; 215 G; 113 T; 1 other;
 SQ 39 7%; Score 623.6; DB 21; Length 688;
 Best Local Similarity 98.0%; Pred. No. 4.2e-92;
 Matches 673; Conservative 0; Mismatches 10; Indels 4; Gaps 4;
 QY 512 GGCTGGGCTAGAGGCCGCGCCCTCCTCCGCCAGCGATGTTACAGGCCCTCCGCC 571
 Db 1 GGCTGGGCATAGAGGCCGCCCTCCGCCAGCGAATGTTACAGGCCCTCCGCC 60
 QY 572 GCACGTGCGCTGTTACACTCTGCTCTGCTCTGCTTCCAGTCAGGGCTGGTSCG 631
 Db 61 GCACGTGCGCTGTTACACTCTGCTCTGCTCTGCTTCCAGTCAGGGCTGGTGC 120
 QY 632 AGGAGAACCTCCGATCCACGTTGAGAACCCAGAGCGGGCTGGGAGATGTA 691
 Db 121 AGGAGAACCTGGACTTCGATCCACGTTGAGAACCCAGAGCGGGCTGGGAGATGTA 180
 QY 692 GCGCTAAGGAGCTGGCTGTACAGCTACAGCCGGACAGGGAAACATCCAG 751
 Db 181 |||||||GGCTAAGGAGCTGGCTGTACAGCTACAGCCGGACAGGGAAAGTCCCACTCTG 240
 QY 752 TCCCTGGGGCAGCATCTGAGGGGGGAGGATGGGAGCAAGTATGCCCACTCTG 811
 Db 241 TCCCTGGGGCAGCATCTGAGGGGGGAGGATGGGAGCAAGTATGCCCACTCTG 300
 QY 812 TGGAGACAGACACCTTCGGTAGTCAGTCGGGATCAAGGGCAAGGAGGGAAATCTAC 871

Db 301 TGGAGACAGACACCTTGGTAGTCAGTCAGGCAAGGACGGAAATCTAACC 360
 QY 872 TGTCCATGACCGCAAGGAAGCAAGTCGTTGGGAGCCGATGGCACCAGCAAGGAGTC 931
 Db 361 TGTTCATGACCGCAAGGAAGCAAGTCGTTGGGAGCCGATGGCACCAGCAAGGAGTC 420
 QY 932 TGTTCATGAGAACGGCAAGTCGTTGGGAGCCGATGGCACCAGCAAGGAGTC 991
 Db 421 TGTTCATGAGAACGGCAAGTCGTTGGGAGCCGATGGCACCAGCAAGGAGTC 480
 QY 992 GCTGTGACTGTGCGCTTACCAAGAGGGGCGGCCGCGAGGSCCCAGACGGGAGA 1051
 Db 481 GCTGTGACTGTGCGCTTACCAAGAGGGGCGGCCGCGAGGSCCCAGACGGGAGA 540
 QY 1052 ACCAGCAGACGTCGATTCAGAACGGCTACCCANGGGC - AGGGGAGCTTCAGAA 1109
 Db 541 ACCAGCAGACGTCGATTCAGAACGGCTACCCANGGGCAGACGGGAGCTTAGAA 600
 QY 1110 GCCCTCAAGTACAGACGGTGCACAGAGGGCTACCCANGGGCAGACGGGAGCT 1168
 Db 601 GCCCTCAAGTACAGAACGGCTACCCANGGGCAGACGGGAGCT 660
 QY 1169 CCT-AGGCCACCCGCCGGGCCCTC 1194
 Db 661 CTTAGGGCACCCGCCGGGCC 687

RESULT 11
 AAZ46767
 ID AAZ46767 standard; cDNA; 621 BP.
 XX
 AC AAZ46767;
 DT 31-MAR-2000 (first entry)
 XX
 DE Human fibroblast growth factor encoding cDNA.
 XX
 KW Fibroblast growth factor; tissue formation;
 KW lung tissue interference; human; ss.
 OS Homo sapiens.
 PN JP11332570-A.
 XX
 PD 07-DEC-1999.
 XX
 PR 27-MAY-1998; 98JP-0145478.
 XX
 PA (SHIO) SHIONOGI & CO LTD.
 DR WPI; 2000-091354/08.
 DR P-PSDB; AAY56817.
 XX
 A new fibroblast growth factor and a gene coding it - useful for prevention, treatment and diagnosis of tissue formation interference or treatment of lung tissue interference. The present sequence represents a human FGF encoding cDNA.
 XX
 PS Claim 1; Page 7-8; 16PP; Japanese.
 XX
 CC The invention provides fibroblast growth factor (FGF) proteins from human, rat and mouse. FGF is useful for prevention, treatment and diagnosis of tissue formation interference or treatment of lung tissue interference. The present sequence represents a human FGF encoding cDNA.
 SQ Sequence 621 BP; 140 A; 180 C; 196 G; 105 T; 0 other;

Query Match 39.5%; Score 619.4; DB 21; Length 621;
 Best Local Similarity 99.8%; Pred. No. 2e-91; 1; Indels 0; Gaps 0;
 Matches 620; Conservative 0; Mismatches 0;

Db 1 ATGGATTCTGGCCCTCCCGCTGACTTCCTGTTACACTTCCTGCTGCTTC 60
 QY 610 CAGGTACAGGTGCTGGTGCAGGAGAACGGTGGACTTCGGCATCCACGG 669
 Db 61 CAGGTACAGGTGCTGGTGCAGGAGAACGGTGGACTTCGGCATCCACGG 120
 QY 670 ACGGGGCTGGGAGGAGTGAGCGCTAAGCAGCTGCGCTGTACAGCCG 729
 Db 121 ACGGGGCTGGGAGGATGAGCCGTTAGCAGCTGCGCTGTACAGCCG 180
 QY 730 ACCAGTGGAAACATCCAGGTCTGGCGCGAGATCAGTGGCGCGAGATCG 789
 Db 181 ACCAGTGGAAACATCCAGGTCTGGCGCGAGATCAGTGGCGCGAGATCG 240
 QY 790 GACAGTATGCCCAGCTCTAGTGGAGAGACACTGGTACTCAAGTCCGATCAG 849
 Db 241 GACAGTATGCCCAGCTCTAGTGGAGAGACACTGGTACTCAAGTCCGATCAG 300
 QY 850 GGCAGGGAGAGGATTCTRACTGCTGAGACGGCAAGGAAGCTGTGGGAGGCC 909
 Db 301 GGCAGGGAGAGGATTCTRACTGCTGAGACGGCAAGGAAGCTGTGGGAGGCC 360
 QY 910 GATGCCACAGCAAGGAGTGTGTTCTCATGAGAGGTTCTGAGAGGTTCTGAGAACAATCACAGGCC 969
 Db 361 GATGCCACAGCAAGGAGTGTGTTCTCATGAGAGGTTCTGAGAGGTTCTGAGAACAATCACAGGCC 420
 QY 970 CTGATGTCGCTTAAGTACTCGGGCTGTGAGAGGTTCTACAGGAGATGAGGTTCTGGAGAACACTACAGGCC 1029
 Db 421 CTGATGTCGCTTAAGTACTCGGGCTGTGAGAGGTTCTACAGGAGATGAGGTTCTGGAGAACACTACAGGCC 480
 QY 1030 AAGGCCCCAGACCCGGAGAACCCAGCAGGAGCTGCAATTTCATGAGGCTACCCCCAG 1089
 Db 481 AAGGCCCCAGACCCGGAGAACCCAGCAGGAGCTGCAATTTCATGAGGCTACCCCCAG 540
 QY 1090 GGGAGCCGAGCTTCAGAGGCCCTCAAGTACAGACCGAGGCTGACAGGAGCTGGTACCCAGG 1149
 Db 541 GGGCAGCCGAGCTTCAGAGGCCCTCAAGTACAGACCGAGGCTGGTACCCAGG 600
 QY 1150 ATCCGGCCACACCCCTGCC 1170
 Db 601 ATCCGGCCACACCCCTGCC 621

RESULT 12
 AAZ46769
 ID AAZ46769 standard; cDNA; 621 BP.
 XX
 AC AAZ46769;
 DT 31-MAR-2000 (first entry)
 XX
 DE Mouse fibroblast growth factor encoding cDNA.
 XX
 KW Fibroblast growth factor; FGF; tissue formation;
 KW lung tissue interference; mouse; ss.
 OS Mus sp.
 XX
 PN JP11332570-A.

XX
 PD 07-DEC-1999.
 XX
 PR 27-MAY-1998; 98JP-0145478.
 XX
 PA (SHIO) SHIONOGI & CO LTD.
 DR WPI; 2000-091354/08.
 DR P-PSDB; AAY56819.
 XX
 A new fibroblast growth factor and a gene coding it - useful for prevention, treatment and diagnosis of tissue formation interference or treatment of lung tissue interference. The present sequence represents a human FGF encoding cDNA.

PT prevention, treatment and diagnosis of tissue formation interference or
XX treatment of lung tissue interference

CC Claim 1; Page 9-10; 16pp; Japanese.

CC The invention provides fibroblast growth factor (FGF) proteins from
CC human, rat and mouse. FGF is useful for prevention, treatment and
CC diagnosis of tissue formation interference or treatment of lung tissue
CC interference. The present sequence represents a mouse FGF encoding cDNA.

XX Sequence 621 BP; 151 A; 168 C; 182 G; 120 T; 0 other;

SQ Query Match 33.3%; Score 533.4; DB 21; Length 621;
Best Local Similarity 90.2%; Pred. No. 6.4e-76;
Matches 560; Conservative 0; Mismatches 61; Indels 0; Gaps 0;

QY 550 ATGTTATCAGCACCCTCGGCCACTGGCAGACTGGCACTTCGCTCATCCACGTGAGAACAG 609
Db 1 ATGTTATCAGCACCCTCGGCCACTGGCAGACTGGCACTTCGCTCATCCACGTGAGAACAG 60

QY 610 CAGGTACAGGACTGTGGCCAGGAGAACGAGCTGGCACTTCGCTCATCCACGTGAGAACAG 669
Db 61 CAGGTACAGGACTGTGGCCAGGAGAACGAGCTGGCACTTCGCTCATCCACGTGAGAACAG 60

QY 670 AGCGGGCTCGGAGCGTGTGGACGGTAAAGAGACCTGGGCTGTTACAGCGCTACAGCGG 729
Db 121 AGCGGGCTCGGAGCGTGTGGACGGTAAAGAGACCTGGGCTGTTACAGCGCTACAGCGG 729

QY 730 ACCAGTGGAACACATCCAGTCCTGGGCCAGGATCAGTGCCCGGCTGAGCTGGGAGGG 789
Db 181 ACCAGTGGAACACATCCAGTCCTGGGCCAGGATCAGTGCCCGGCTGAGCTGGGAGGG 789

QY 790 GACAAGTAGGCCAGCTTCTACTGGAGACAGACACCTCGGCTACTGCAAGTCGGATCAAG 849
Db 241 GACAAGTAGGCCAGCTTCTACTGGAGACAGACATCCAGTCGGGAGTCAGTCGGATCAAG 300

QY 850 GCGAAGGAGACCGAATTCTACCTGTGGATGAAACCGGAAAGGAAGCTGTTGGGAAGCCC 909
Db 301 GCGAAGGAGACCGAATTCTACCTGTGGATGAAACCGGAAAGGAAGCTGTTGGGAAGCCC 909

QY 910 GATGGCACCGCAAGGGAGTGTGTTACATCGGAGAAGGTTCTGGAGAACACTACAGGCC 969
Db 361 GATGGCACCGCAAGGGAGTGTGTTACATCGGAGAAGGTTCTGGAGAACACTACAGGCC 969

QY 970 CTGATCTCGCTTAAGTACTCTGGGCTGTACTGGGCTTCACCAAGAGGGGGGGGGGG 1029
Db 421 CTGATCTCGCTTAAGTACTCTGGGCTGTACTGGGCTTCACCAAGAGGGGGGGGGGG 480

QY 1030 AGGGCCCCAAGACCGGGGAGACCAAGCAGGAGCTGTCATTCATGAGGGCTACCCCAA 1089
Db 481 AAGGGTCCCAAGACCGGGAGACCAAGCAGGAGCTGTCATGAGGGCTACCCCAA 1089

QY 1090 GGGCACCGGAGCTTGAGACGCCCTCAAGTACACGAGCGTGGACAGAGGAGGTTCCCGCG 1149
Db 541 GGACAGGCCAGCTGCAGAACGCCCTCAATACACCAAGCAGTACCCCGGG 600

QY 1150 ATCCGCCCCAACACCCCTGCC 1170
Db 601 ATCCGCCCCAACACCCCTGCC 621

RESULT 13

AZ45768
ID AZ45768 standard; cDNA; 621 BP.
XX
XX AZ45768;
XX DT 31-MAR-2000 (first entry)
XX DE Rat fibroblast growth factor encoding cDNA.
XX KW Fibroblast growth factor; FGF; tissue formation;
XX lung tissue interference; rat; ss.

OS Rattus sp.
XX PN JP11332570-A.
XX PD 07-DEC-1999.
XX PF 27-MAY-1998; 98JP-0145478.
XX PR 27-MAY-1998; 98JP-0145478.
XX PA (SHIO) SHIONOGI & CO LTD.
XX DR WPI; 2000-091354/08.
XX P-FSDB; AAY5818.

PT A new fibroblast growth factor and a gene coding it - useful for
PT prevention, treatment and diagnosis of tissue formation interference or
PT treatment of lung tissue interference

CC Claim 1; Page 8-9; 16pp; Japanese.

CC The invention provides fibroblast growth factor (FGF) proteins from
CC human, rat and mouse. FGF is useful for prevention, treatment and
CC diagnosis of tissue formation interference or treatment of lung tissue
CC interference. The present sequence represents a rat FGF encoding cDNA.

XX Sequence 621 BP; 151 A; 169 C; 183 G; 118 T; 0 other;

SQ Query Match 33.2%; Score 521.8; DB 21; Length 621;
Best Local Similarity 90.0%; Pred. No. 1.2e-75;
Matches 559; Conservative 0; Mismatches 62; Indels 0; Gaps 0;

QY 550 ATGTTATCAGCACCCTCGGCCACTGGCAGACTGGCACTTCGCTCATCCACGTGAGAACAG 609
Db 1 ATGTTATCAGCACCCTCGGCCACTGGCAGACTGGCACTTCGCTCATCCACGTGAGAACAG 60

QY 610 CAGGTACAGGACTGTGGCCAGGAGAACGAGCTGGCACTTCGCTCATCCACGTGAGAACAG 669
Db 61 CAGGTACAGGACTGTGGCCAGGAGAACGAGCTGGCACTTCGCTCATCCACGTGAGAACAG 60

QY 670 AGCGGGCTCGGAGCGTGTGGACGGTAAAGAGACCTGGGCTGTTACAGCGCTACAGCGG 729
Db 121 AGCGGGCTCGGAGCGTGTGGACGGTAAAGAGACCTGGGCTGTTACAGCGCTACAGCGG 729

QY 730 ACCAGTGGAACACATCCAGTCCTGGGCCAGGATCAGTGCCCGGCTGAGCTGGGAGGG 789
Db 181 ACCAGTGGAACACATCCAGTCCTGGGCCAGGATCAGTGCCCGGCTGAGCTGGGAGGG 789

QY 790 GACAAGTAGGCCAGCTTCTACTGGAGACAGACACCTCGGCTACTGCAAGTCGGATCAAG 849
Db 241 GACAAGTAGGCCAGCTTCTACTGGAGACAGACATCCAGTCGGGAGTCAGTCGGATCAAG 300

QY 850 GCGAAGGAGACCGAATTCTACCTGTGGATGAAACCGGAAAGGAAGCTGTTGGGAAGCCC 909
Db 301 GCGAAGGAGACCGAATTCTACCTGTGGATGAAACCGGAAAGGAAGCTGTTGGGAAGCCC 909

QY 910 GATGGCACCGCAAGGGAGTGTGTTACATCGGAGAAGGTTCTGGAGAACACTACAGGCC 969
Db 361 GATGGCACCGCAAGGGAGTGTGTTACATCGGAGAAGGTTCTGGAGAACACTACAGGCC 969

QY 970 CTGATCTCGCTTAAGTACTCTGGGCTGTACTGGGCTTCACCAAGAGGGGGGGGGGG 1029
Db 421 CTGATCTCGCTTAAGTACTCTGGGCTGTACTGGGCTTCACCAAGAGGGGGGGGGGG 480

QY 1030 AGGGCCCCAAGACCGGGGAGACCAAGCAGGAGCTGTCATGAGGGCTACCCCAA 1089
Db 481 AAGGGTCCCAAGACCGGGGAGACCAAGCAGGAGCTGTCATGAGGGCTACCCCAA 1089

QY 1090 GGGCACCGGAGCTTGAGACGCCCTCAAGTACACGAGCGTGGACAGAGGAGGTTCCCGCG 1149
Db 541 GGACAGGCCAGCTGCAGAACGCCCTCAATACACCAAGCAGTACCCCGGG 600

This is the degenerate nucleotide sequence of the novel fibroblast growth factor homologue zRGF-5, used in the method of the invention. The zRGF-5 polypeptides can be used (optionally ex vivo) for enhancing the proliferation of cardiac tissue cells. The polypeptides, nucleic acids, antagonists, and antibodies can also be used in the treatment of disorders such as heart failure, stroke, hypertension, bone defects, cancer, arthritis, or wounds. The products can also be used in the study of cardiac myocyte hyperplasia and regeneration, to target delivery of agents to the heart and for detection and diagnosis. The

Search completed: April 26, 2003, 16:27:16
Job time : 276 secs